

SEWAGE AND WASTEWATER ADVISORY COMMITTEE
Advisory to the Board of Clark County Commissioners

Conveyed virtually in accordance with changes to Open Meeting Law during the 2021 Legislative Session
Meeting Minutes of November 13, 2024

MEMBERS	Present	Absent
Clark County (2 Members)		
John Solvie (Member)	X	
Joseph Leedy (Member)	X	
VACANT (Alternate)		
Daylin Sigler (Alternate)	X	
City of Las Vegas (3 Members)		
John Bettencourt (Member)	X	
Charles Trushel (Member)		X
Dan Combs (Member)	X	
Dawn Boyer (Alternate)	X	
Tom Hornsby (Alternate)	X	
Chris Marinch (Alternate)	X	
City of Henderson (2 Members)		
Brian Carlson (Member) VICE-CHAIR	X	
Adrian Edwards (Member)	X	
VACANT (Alternate)		
James Koloskie (Alternate)		X
City of North Las Vegas (1 Member)		
Alan Wolfley (Member)	X	
Bryce Burrell (Alternate)		X
Clark County Water Reclamation District (1 Member)		
Daniel Fischer (Member) CHAIR	X	
Richard Donahue (Alternate)	X	
Moapa Valley Water District (1 Member)		
Joe Davis (Member)		X
Lon Dalley (Alternate)	X	
Las Vegas Valley Water District (1 Member)		
Todd Tietjen (Member)	X	
Xiaoping Zhou (Alternate)	X	
Mesquite (1 Member)		
Bill Tanner (Member)		X
Travis Anderson (Alternate)		X
Virgin Valley Water District (1 Member)		
VACANT (Member)		
Aaron Bunker (Alternate)		X
Boulder City (1 Member)		
Joseph Stubitz (Member)	X	
Jim Keane (Alternate)		X

Guests Present

Thomas Minwegen	CCWRD
Elise Nguyen	CCWQ
Katelynn Daughtery	CCWQ
JD Dotchin	NDEP
Daniel Isler	SNHD
John M. Gonzales	B&C
Matthew Matasci	B&C

1. CALL TO ORDER

The Sewage and Wastewater Advisory Committee (SWAC) meeting was called to order by Chair, Dan Fischer, of Clark County Water Reclamation District at 9:03 a.m. It was confirmed that the meeting was properly noticed and posted in accordance with the Open Meeting Law.

2. COMMENTS BY THE GENERAL PUBLIC - None

3. APPROVAL OF THE MINUTES OF THE MEETING OF AUGUST 14, 2024

Adrian Edwards motioned to approve the August 14, 2024, minutes, and John Bettencourt seconded. The motion was approved.

4. APPROVAL OF AGENDA

Chris Marinch motioned to approve the agenda, and Dan Combs seconded. The motion was approved.

5. DISCUSSION OF QUARTERLY FLOW REPORT

The group discussed the flow report for the third quarter of 2024:

- Wastewater flows are as expected
- Water deliveries are as expected
- LVVWD water deliveries are down, which may be due to conservation efforts

6. MEMBER UPDATES

A. Moapa Valley Water District

- N/A

B. Las Vegas Valley Water District

- Scaled down Las Vegas Wash construction projects due to cost
- Routine monitoring ongoing
- Entering outage period
- Lake Mohave – *Microcystis* identified. Cause has not been determined

C. Boulder City

- Bar screen installation estimated to be completed in early 2025
- An odor scrubber has been installed at a lift station and in the public right of way to address odor complaint issues

- Exploring two options for return flows to Lake Mead: 1) horizontal entry to the lake via Boulder City infrastructure or 2) redirecting flows to the City of Henderson treatment plant

D. Virgin Valley Water District

- N/A

E. City of Mesquite

- N/A

F. City of Las Vegas

- Filtration rehabilitation project is being finalized
- Working to get their first turbo blower online
- Headworks and dewatering rehabilitation
- WEF Manual training starting in January (CEU certified)
- Lab updates
 - Having a meeting to discuss plans for a new laboratory
 - Hiring a chemist and water quality technician
 - CEUs approved for ethics training
- Received NACWA 25 Platinum Award

G. Clark County Water Reclamation District

- Collection System Updates:
 - Board of trustees awarded a construction project for Whitney Lift Station
 - Lincoln Lift Station construction project had been awarded previously
 - 2024 Formula 1 race – 96 CCWRD manholes have been raised and are secured for the race
- The Flamingo Plant Updates:
 - CIP projects ongoing – expansion of preliminary treatment should be completed in 2025
 - Completed wastewater surveillance sampling for a national health conference (21 consecutive days)
 - Recruiting for a Research Scientist

H. City of North Las Vegas

- Flow equalization basin is online
- Performing annual bioreactor maintenance – leading to slight increase in phosphorous
- Initiated headworks loading study – should be finalized by March 2025
- Recruiting Grade I, II, and III operators
- Septage receiving facility is operational

I. City of Henderson

- CIP – phase 4 is ongoing (scheduled for completion December 2025)
- Cadence lift station scheduled to be online by February
- Performing maintenance for oxidation ditch 1
- Received NACWA 20 Platinum Award

J. Clark County

- The new draft Stormwater Management Plan was submitted to NDEP for review and approval
- SWAC Alternate Member Sara Gedo is no longer with Clark County Water Quality
- Daylin Sigler has taken over SWAC administration responsibilities

7. PRESENTATION: Area-Wide Water Quality Management Plan Update

- A presentation was provided by Clark County Water Quality on the Area-Wide Water Quality Management Plan update project.

8. MEMBER VACANCIES

- A. Virgin Valley Water District – 1 member vacancy
- B. City of Henderson – 1 alternate vacancy
- C. Clark County – 1 alternate vacancy

9. COMMENTS BY THE GENERAL PUBLIC

- A. Daniel Isler (Southern Nevada Health District)
 - a. Regulations were sent to Wastewater agencies, LVVWD, and NDEP for initial comment
 - b. Business impact, formal public outreach, and workshops to follow.
- B. Deena Hanoun (Southern Nevada Water Authority)
 - a. As part of SNWA's Bureau of Reclamation grant, SNWA would like to meet with wastewater agencies to collaborate on computer model scenarios for planning efforts

10. SCHEDULE NEXT MEETING

The next meeting is scheduled for February 5, 2025, at 9:00 am. A meeting invite will be sent out.

11. ADJOURNMENT

The meeting was adjourned at 10:14 a.m.

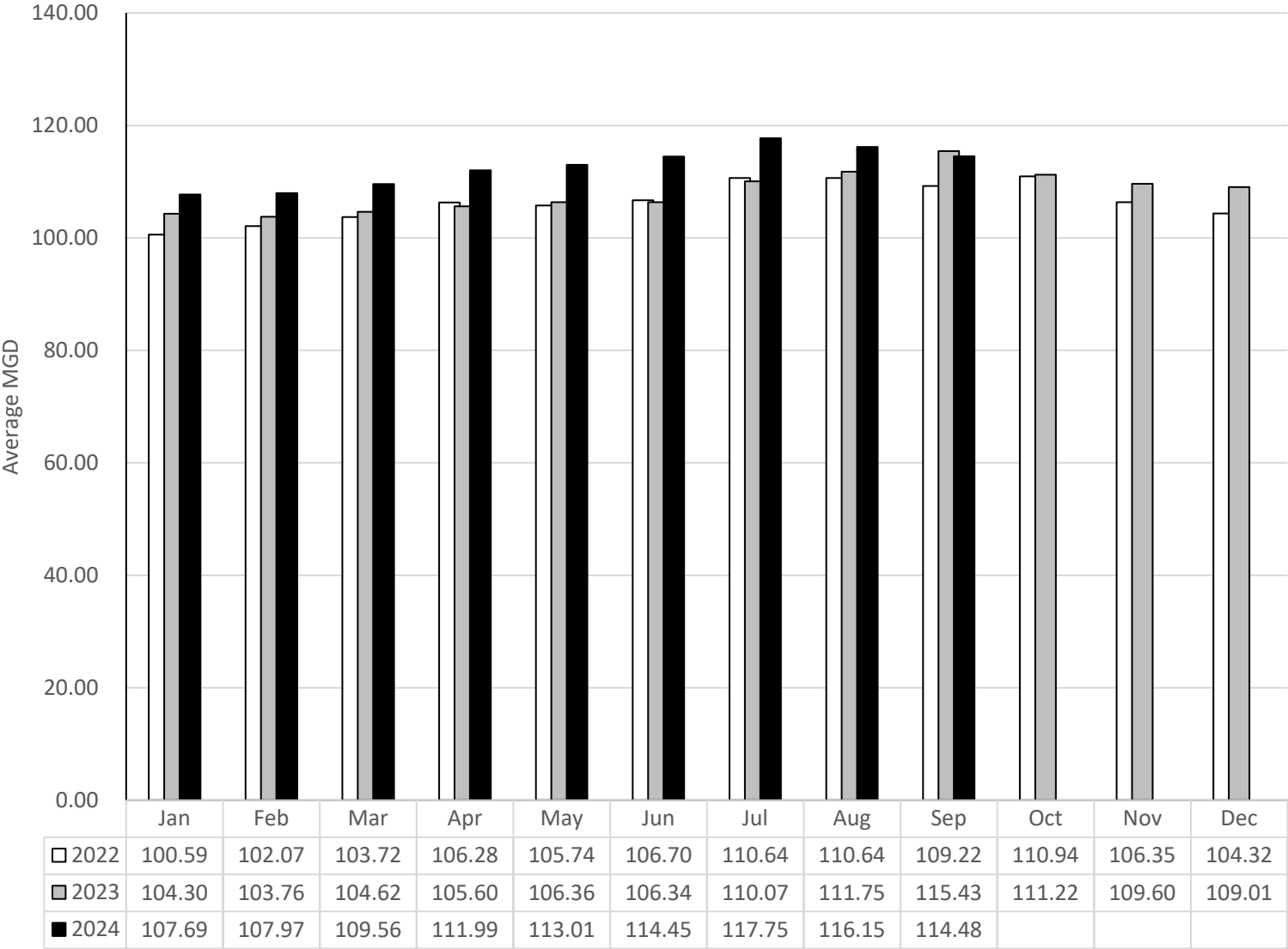
2024
3rd Quarter Flow Report For
Clark County Sewage And
Wastewater Advisory
Committee
(SWAC)

October 30, 2024

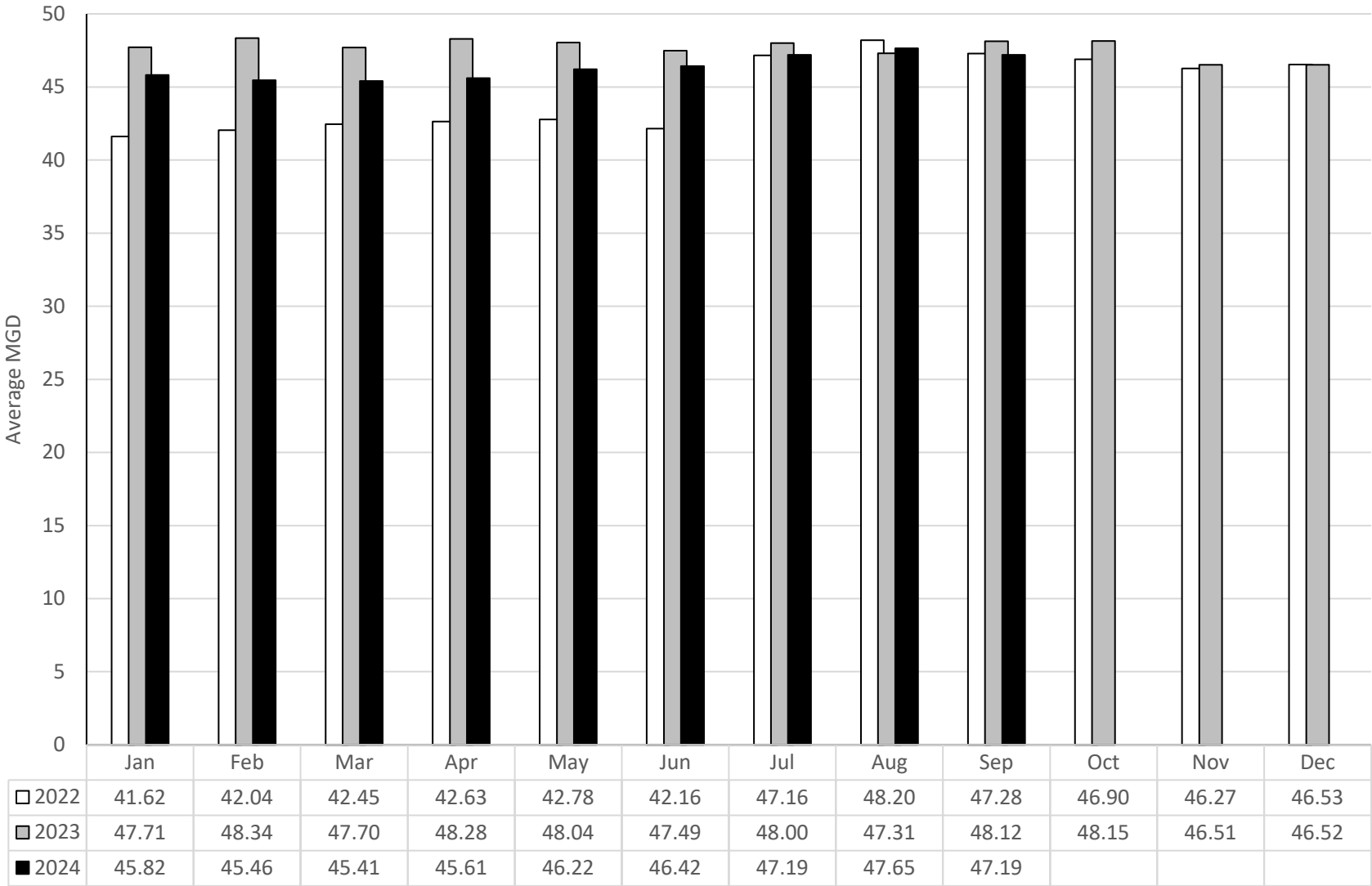
Wastewater Flows

2022 through 2024

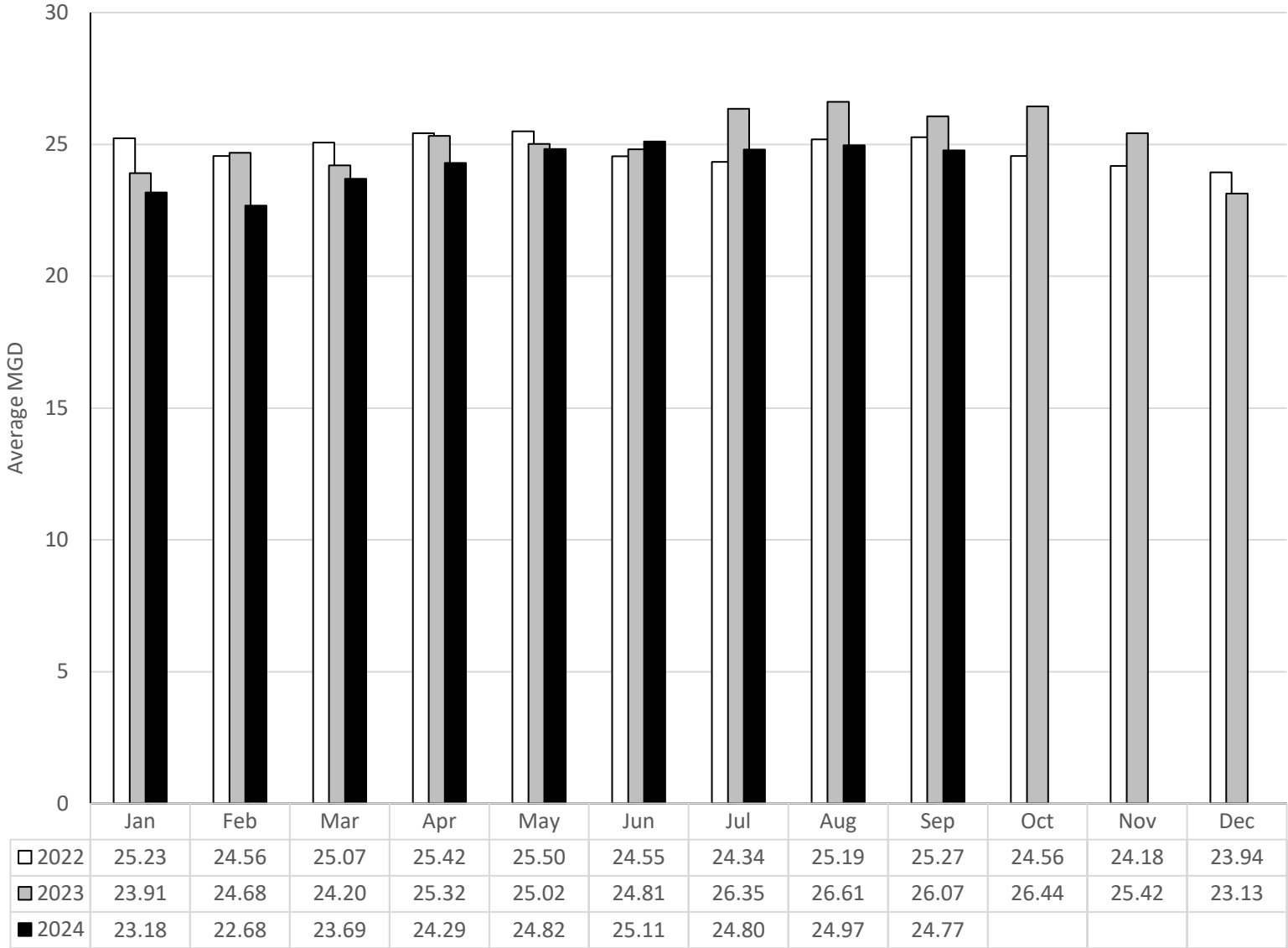
Clark County Water Reclamation District Wastewater Flows



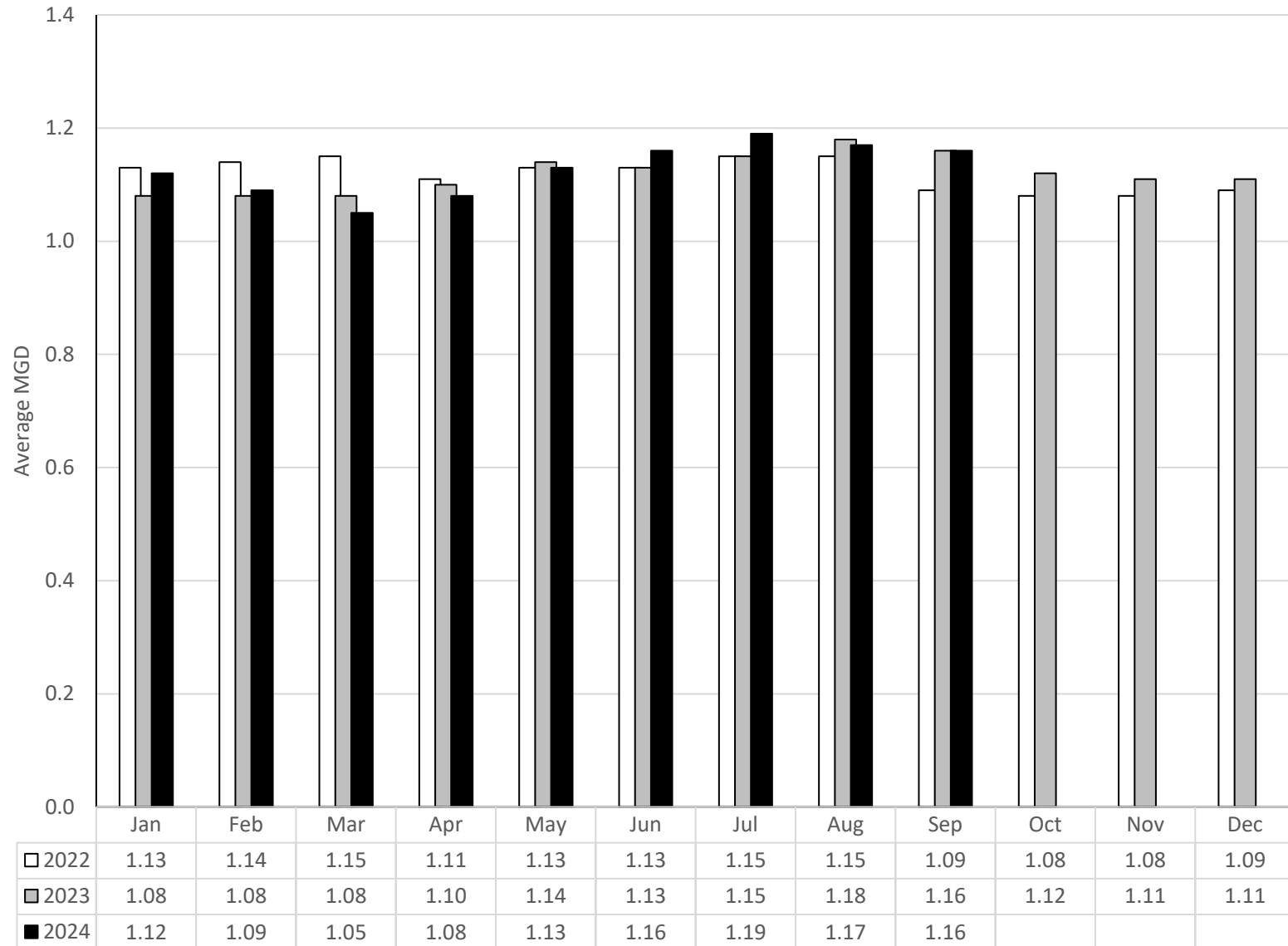
City of Las Vegas Wastewater Flows



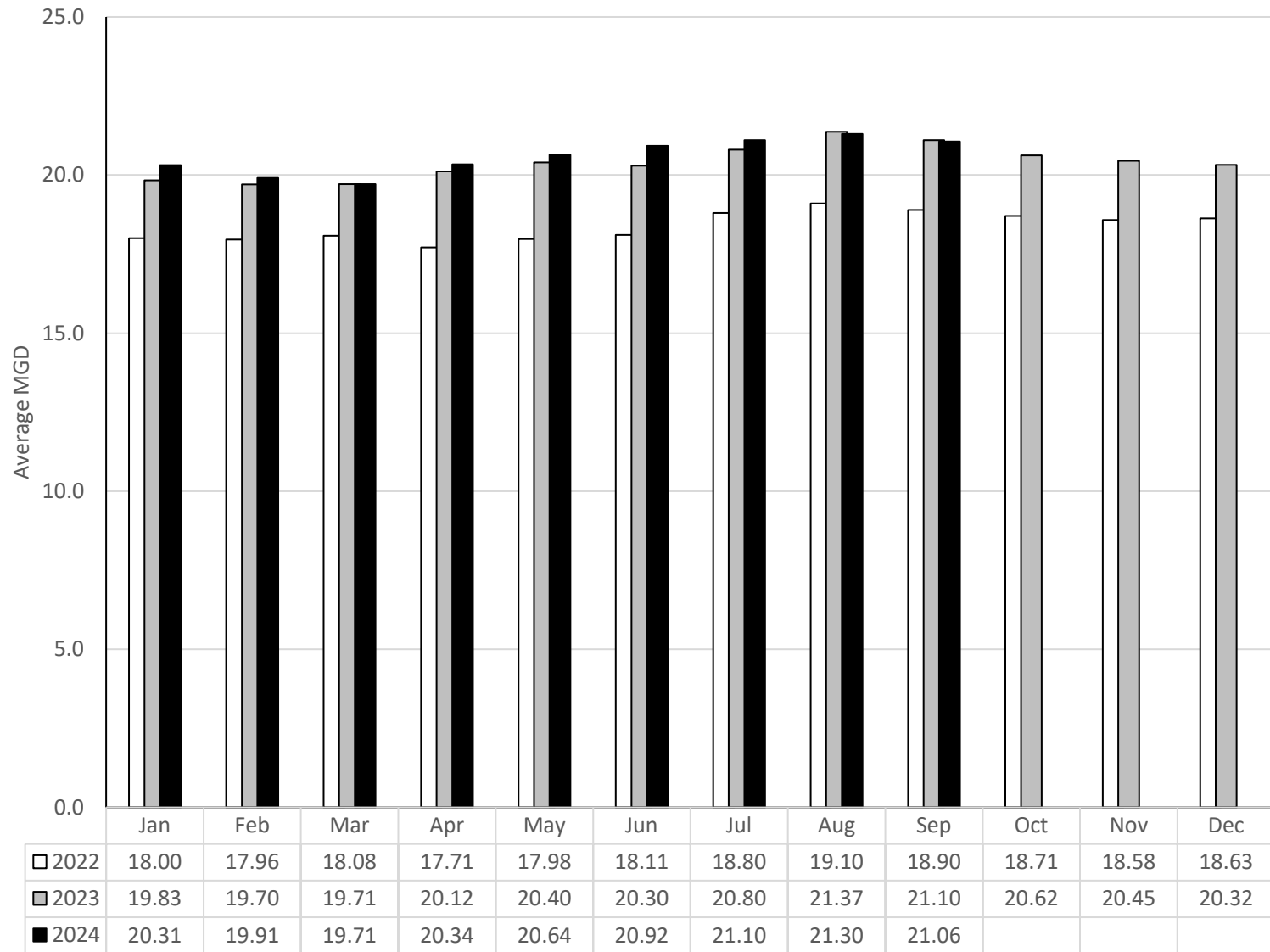
City of Henderson Wastewater Flows



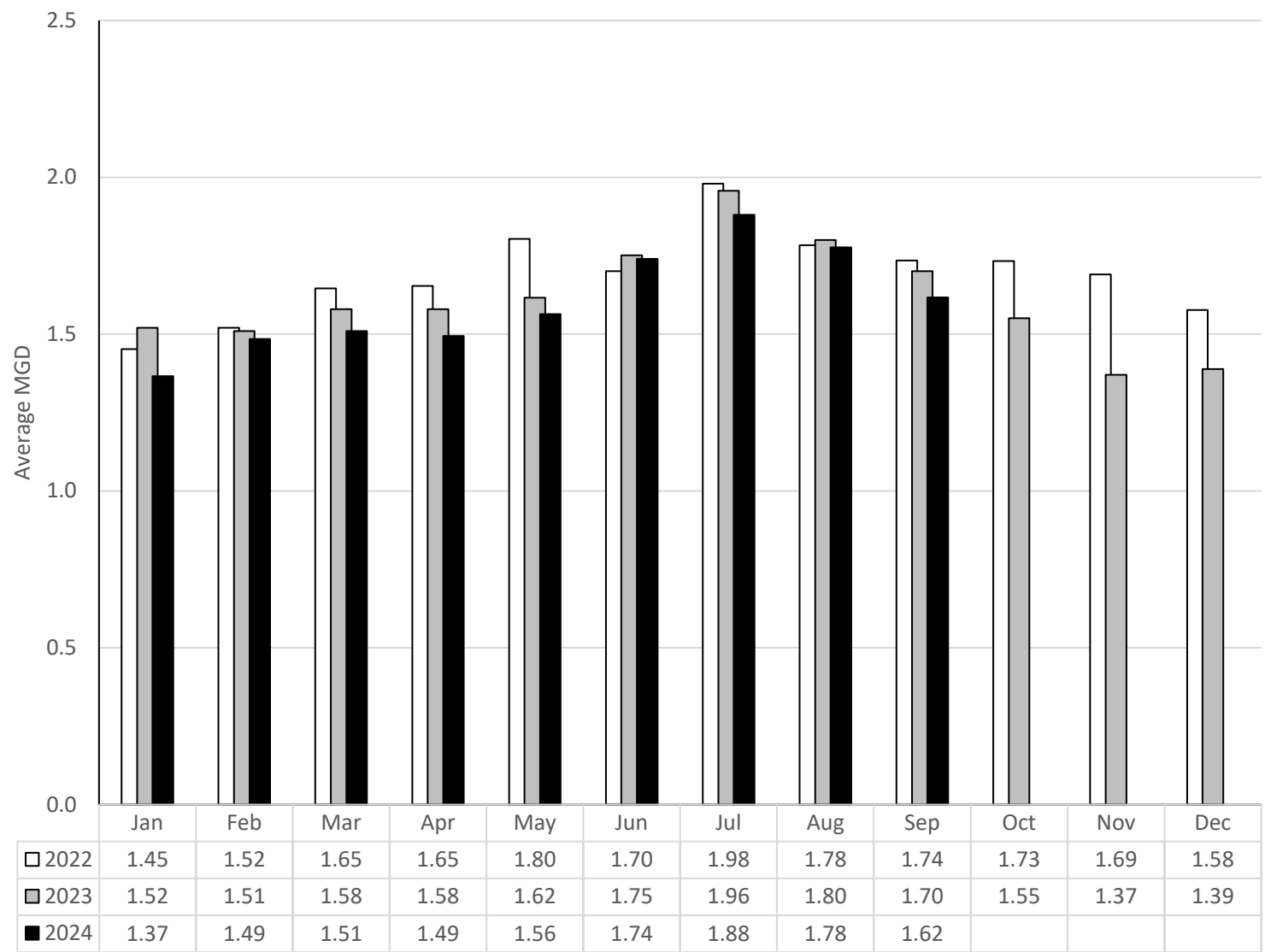
Boulder City Wastewater Flows



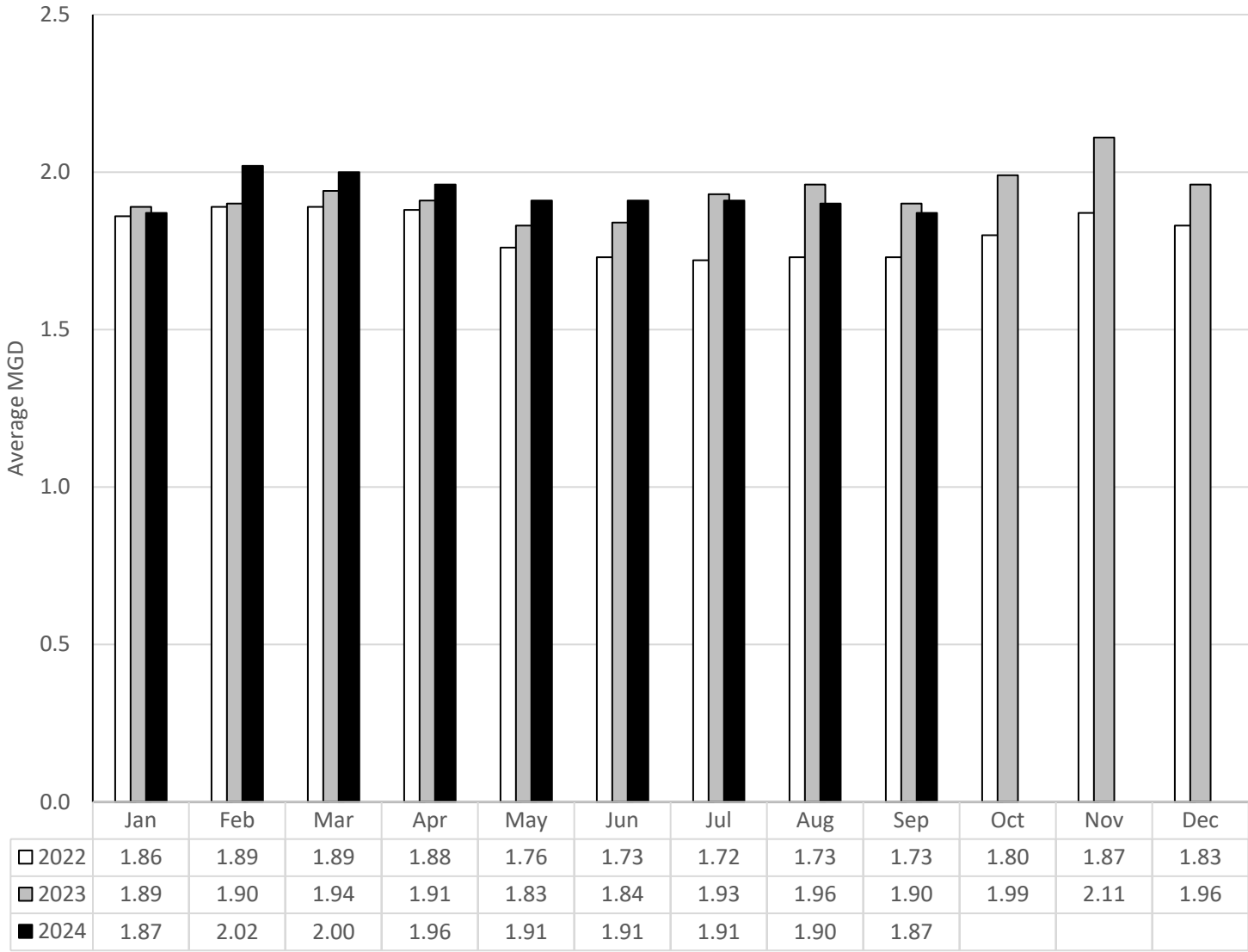
City of North Las Vegas Wastewater Flows



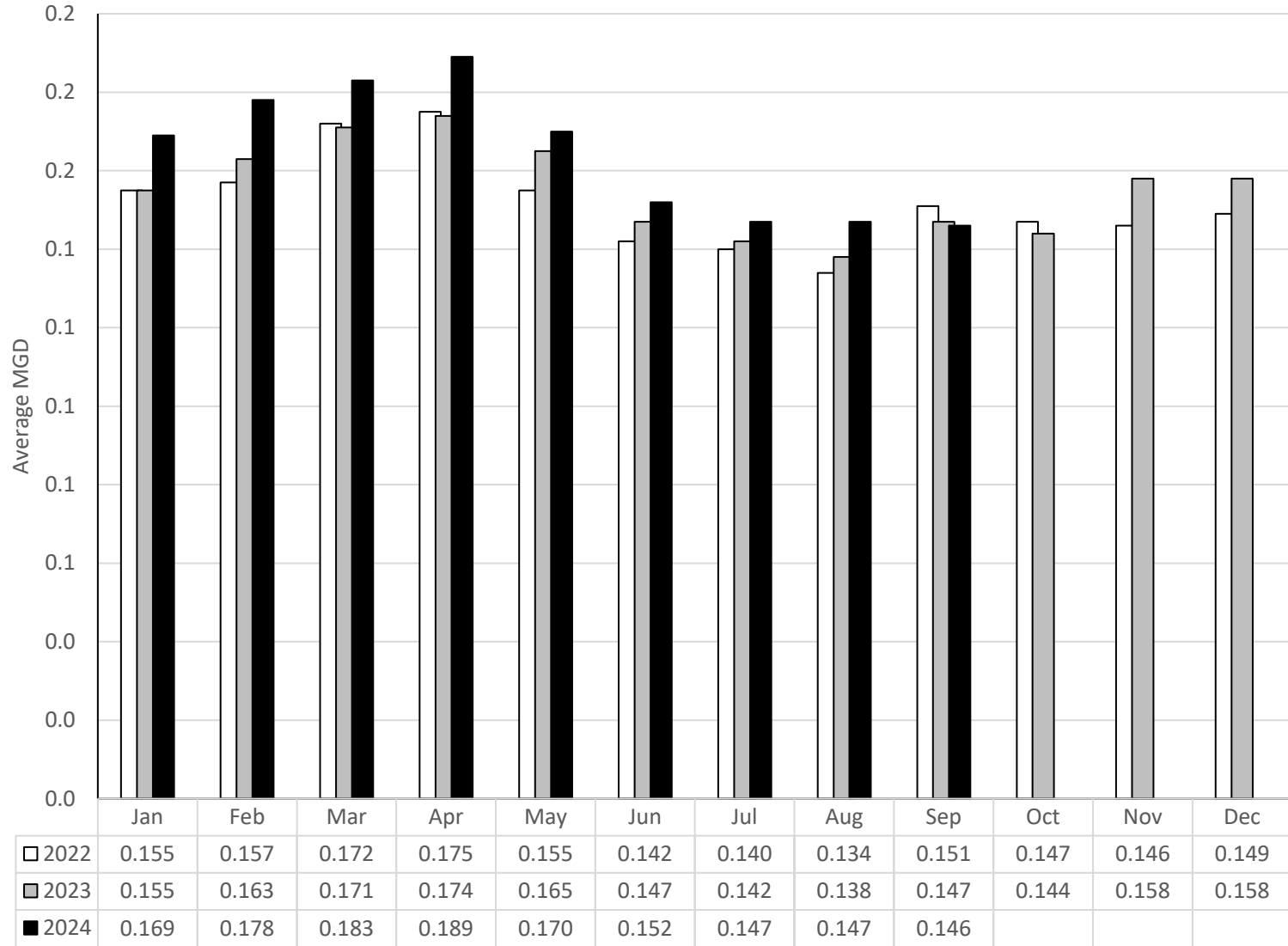
Laughlin Wastewater Flows



City of Mesquite Wastewater Flows



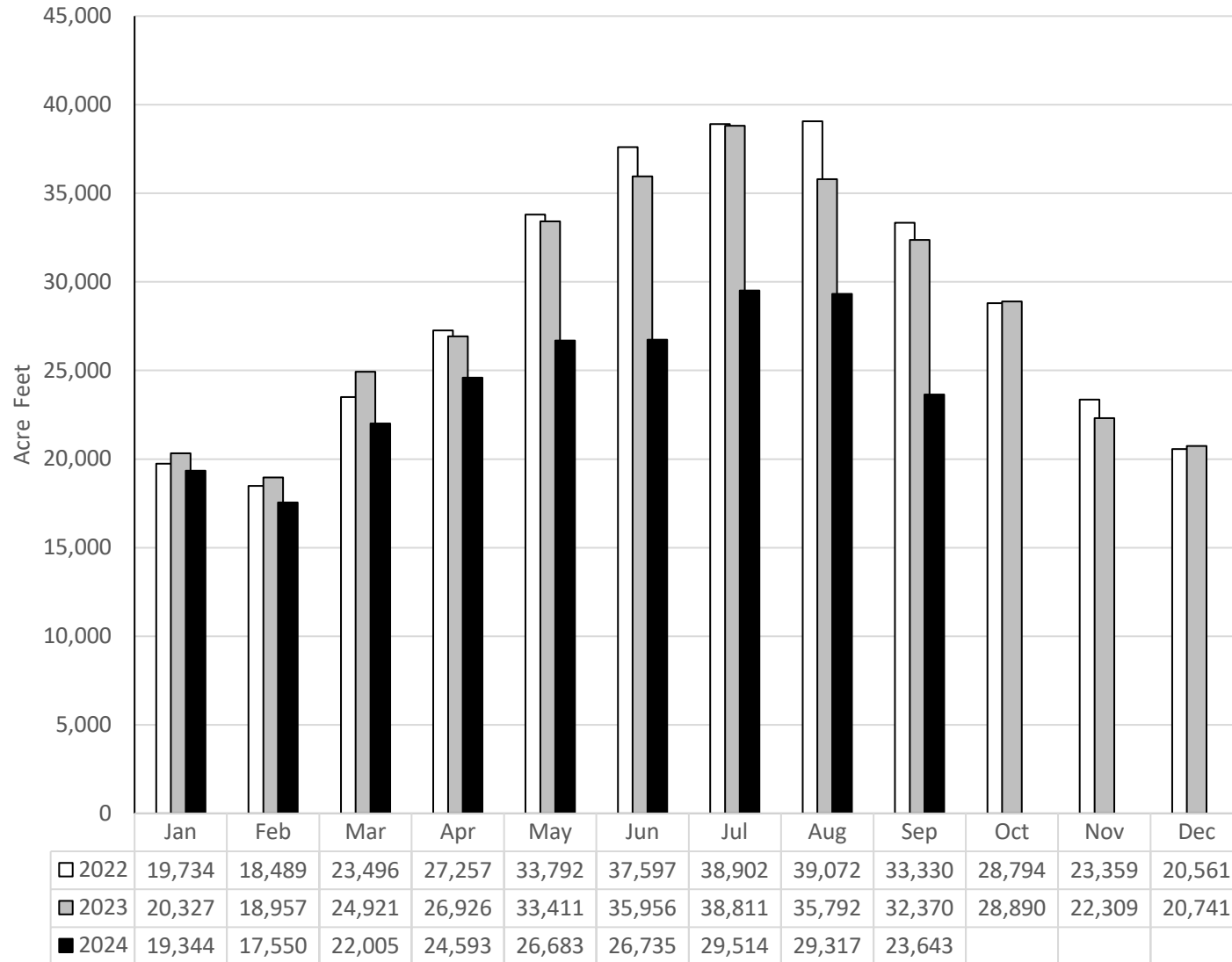
Moapa Wastewater Flows



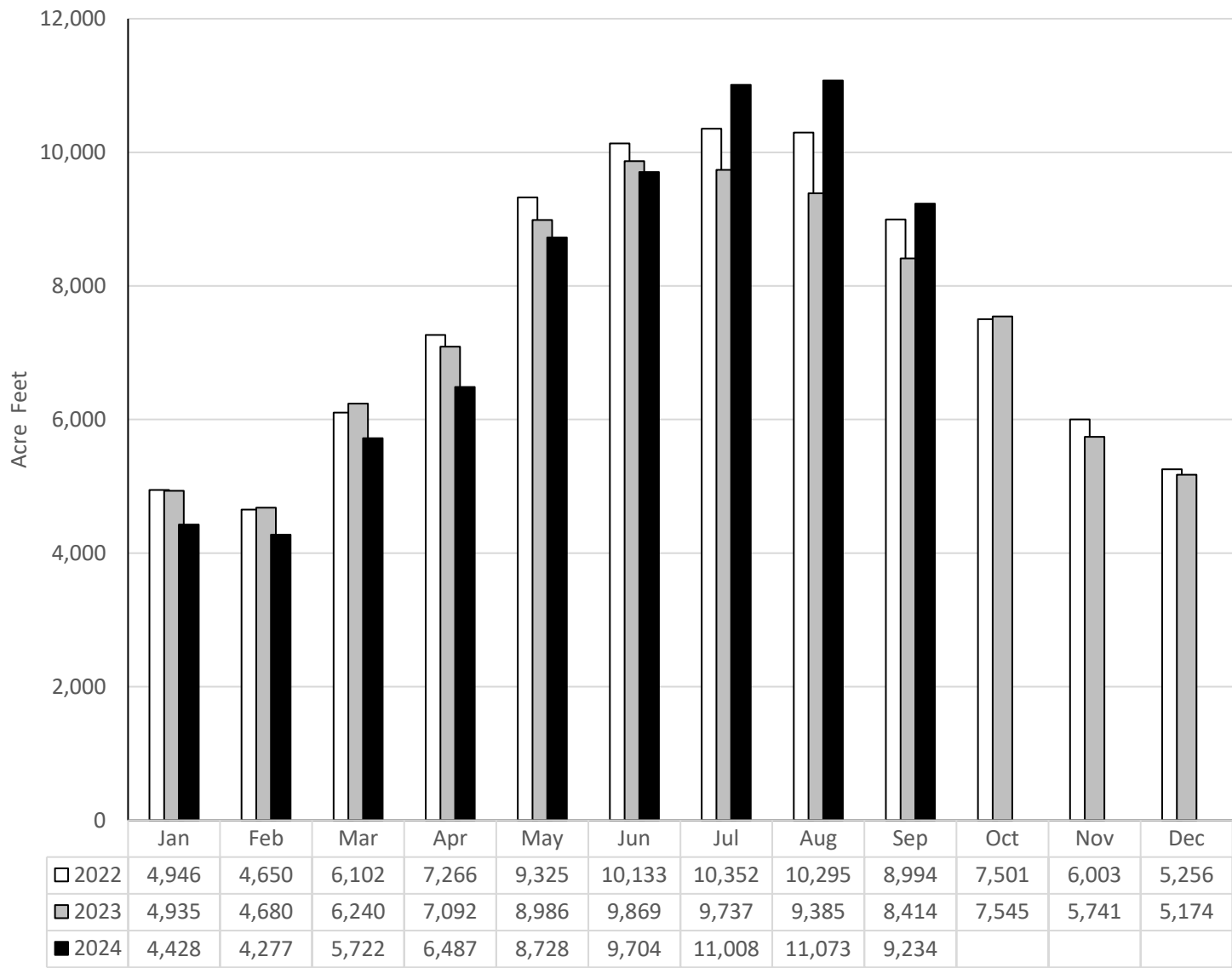
Water Production

2022 through 2024

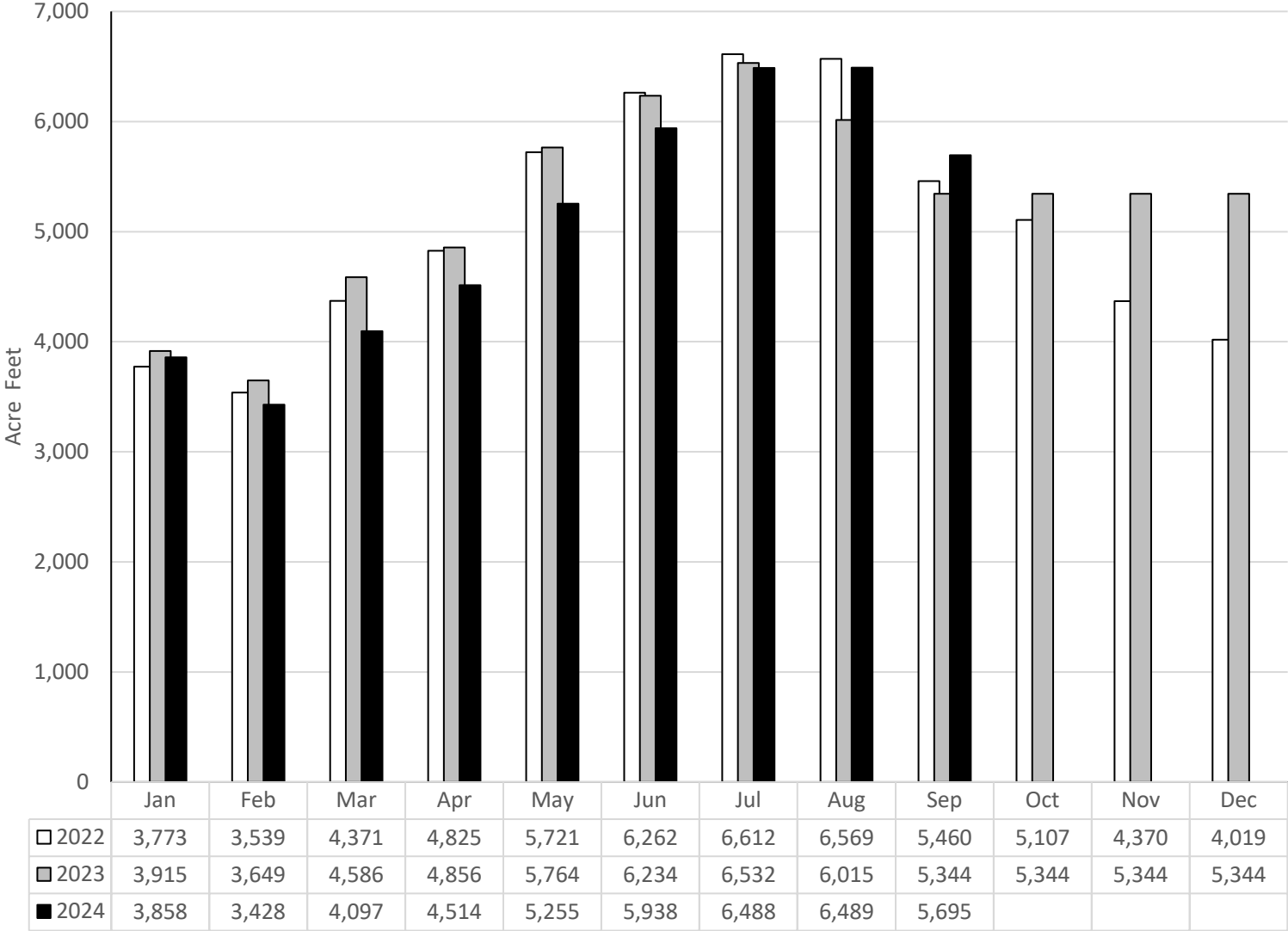
Las Vegas Valley Water District Water Production



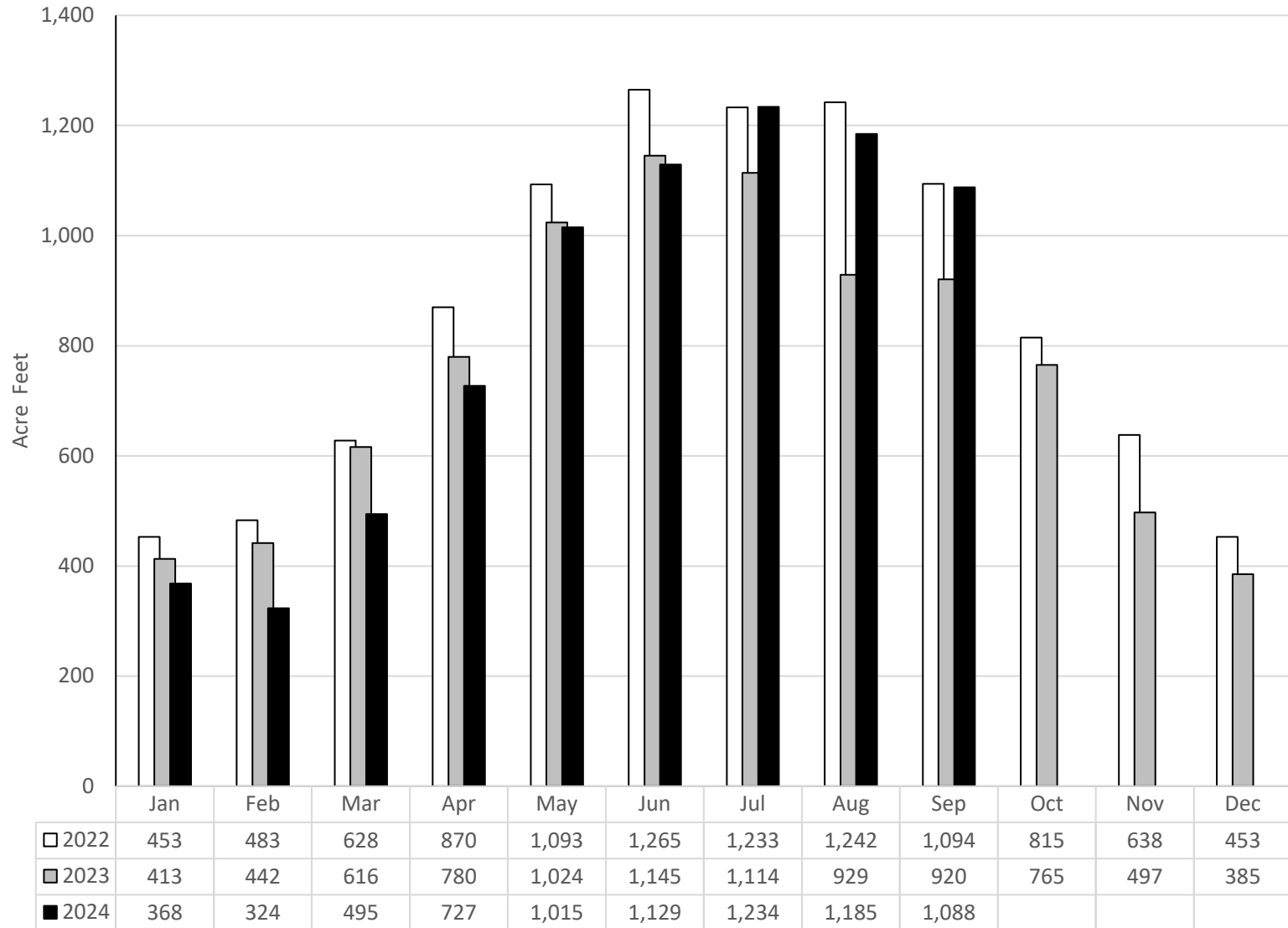
City of Henderson Water Production



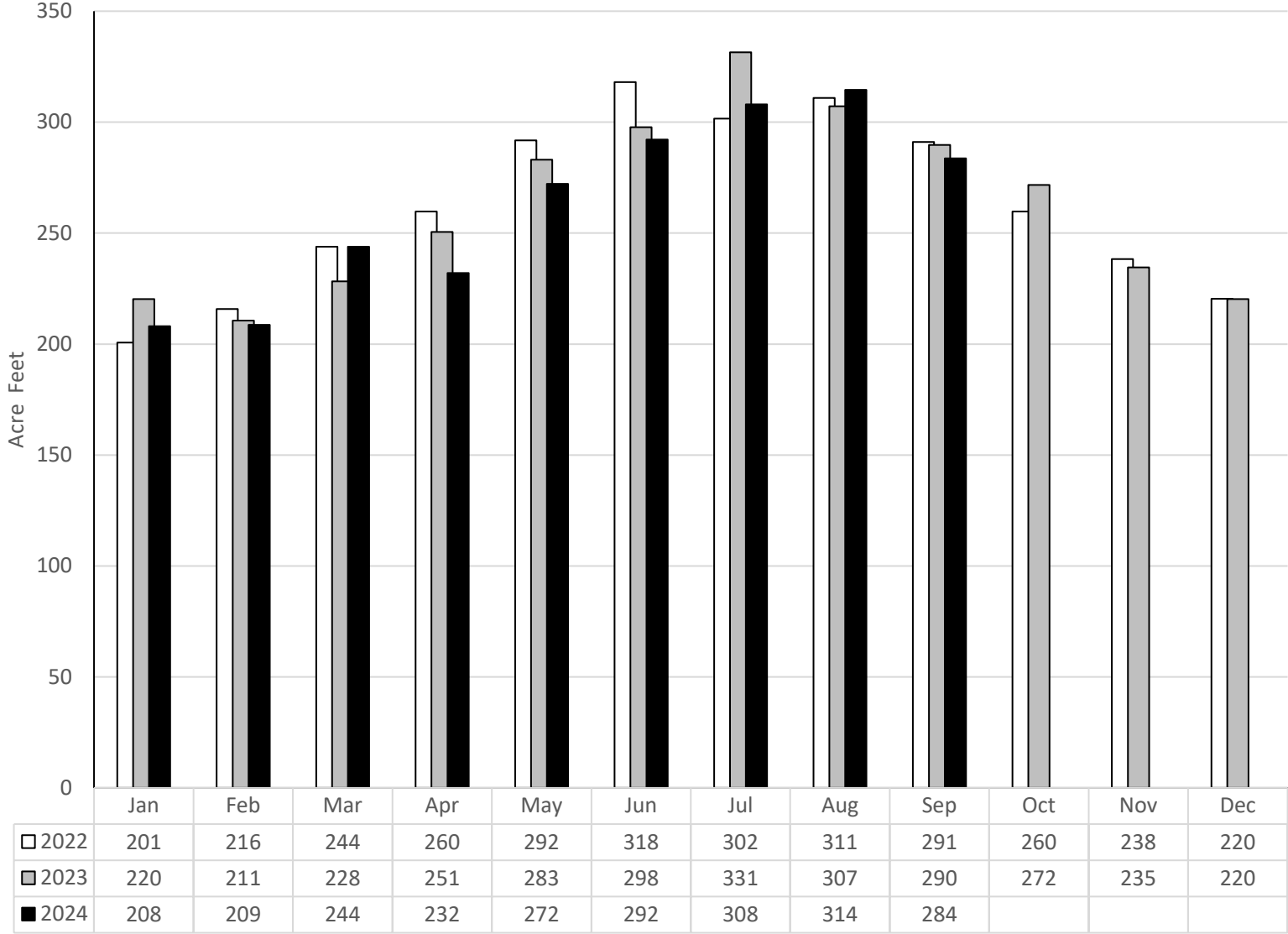
City of North Las Vegas Water Production



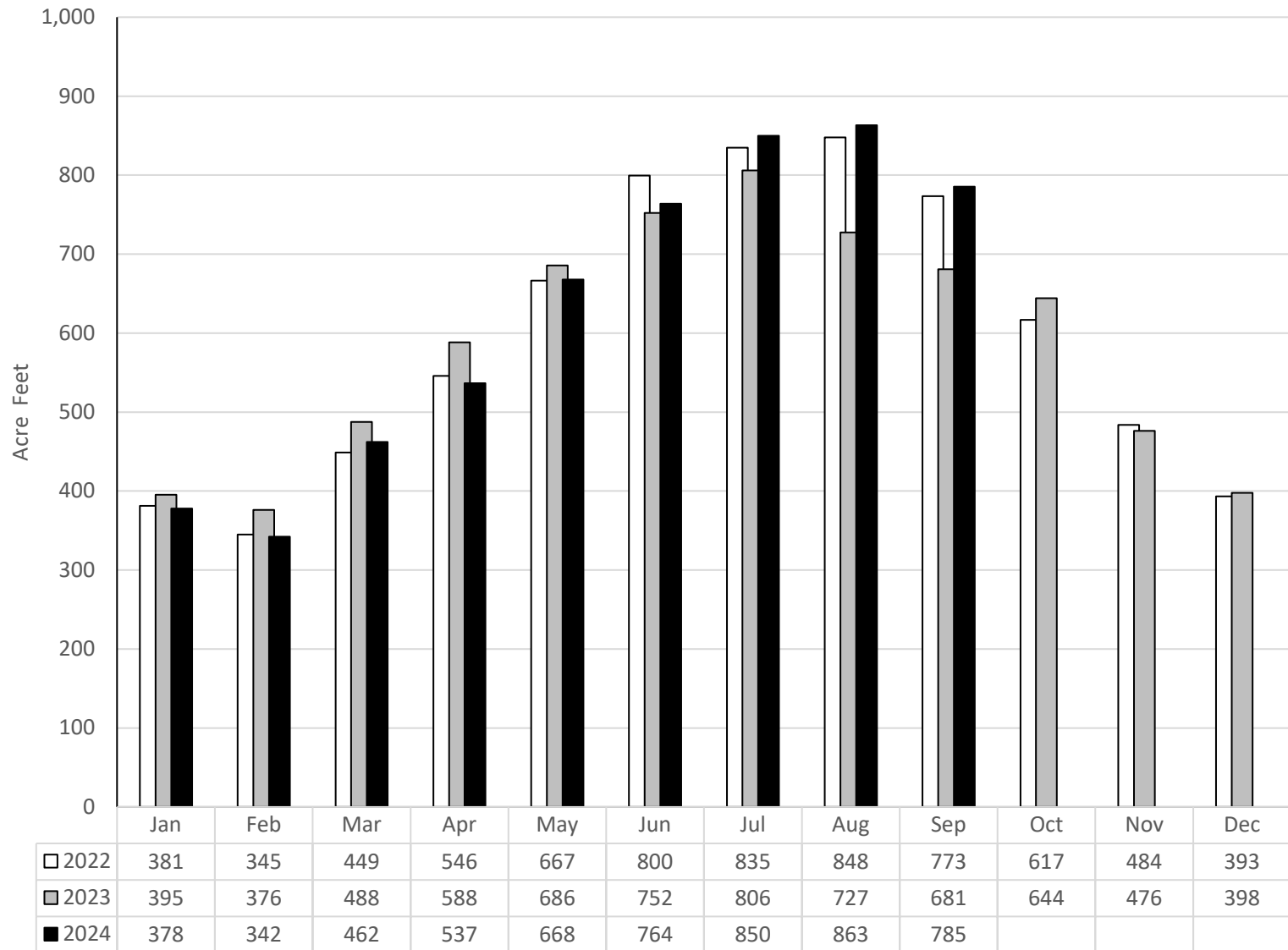
Boulder City Water Production



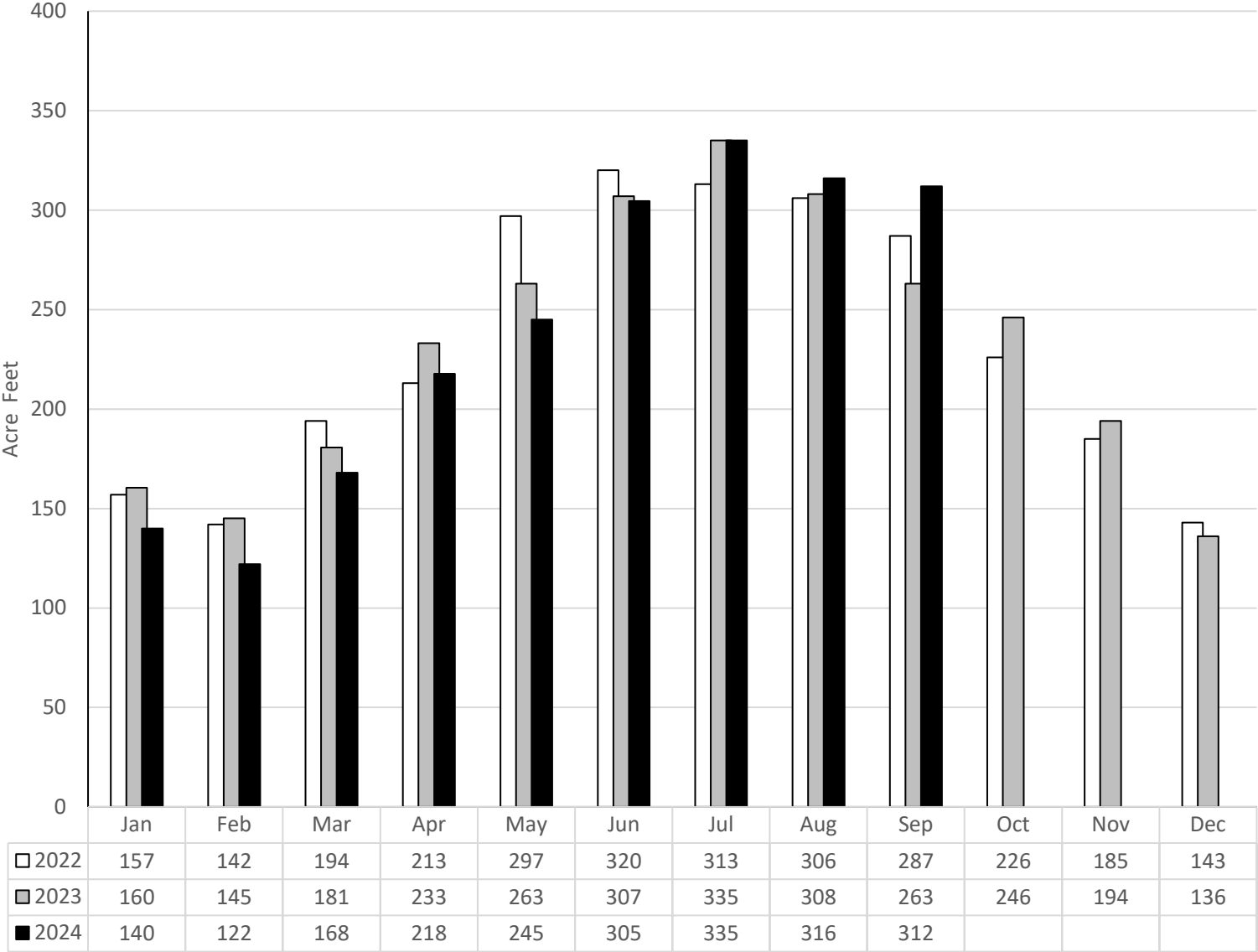
Big Bend Water District Water Production



Virgin Valley Water District Water Production



Moapa Valley Water District Water Production



Historic Trends Influent Wastewater Flows

(Avg. in MGD)

	Clark County Water Reclamation District *			City of Las Vegas			City of North Las Vegas			City of Henderson			Boulder City		
Month	2002	2023	2024	2002	2023	2024	2002	2023	2024	2002	2023	2024	2002	2023	2024
Jan	100.59	104.30	107.69	41.62	47.71	45.82	18.00	19.83	20.31	25.23	23.91	23.18	1.13	1.08	1.12
Feb	102.07	103.76	107.97	42.04	48.34	45.46	17.96	19.70	19.91	24.56	24.68	22.68	1.14	1.08	1.09
Mar	103.72	104.62	109.56	42.45	47.70	45.41	18.08	19.71	19.71	25.07	24.20	23.69	1.15	1.08	1.05
Apr	106.28	105.60	111.99	42.63	48.28	45.61	17.71	20.12	20.34	25.42	25.32	24.29	1.11	1.10	1.08
May	105.74	106.36	113.01	42.78	48.04	46.22	17.98	20.40	20.64	25.50	25.02	24.82	1.13	1.14	1.13
Jun	106.70	106.34	114.45	42.16	47.49	46.42	18.11	20.30	20.92	24.55	24.81	25.11	1.13	1.13	1.16
Jul	110.64	110.07	117.75	47.16	48.00	47.19	18.80	20.80	21.10	24.34	26.35	24.80	1.15	1.15	1.19
Aug	110.64	111.75	116.15	48.20	47.31	47.65	19.10	21.37	21.30	25.19	26.61	24.97	1.15	1.18	1.17
Sep	109.22	115.43	114.48	47.28	48.12	47.19	18.90	21.10	21.06	25.27	26.07	24.77	1.09	1.16	1.16
Oct	110.94	111.22		46.90	48.15		18.71	20.62		24.56	26.44		1.08	1.12	
Nov	106.35	109.60		46.27	46.51		18.58	20.45		24.18	25.42		1.08	1.11	
Dec	104.32	109.01		46.53	46.52		18.63	20.32		23.94	23.13		1.09	1.11	
ANNUAL	106.43	108.17	112.56	44.92	47.68	46.33	18.38	20.39	20.59	24.82	25.16	24.26	1.12	1.12	1.13

* Includes estimated .5 MGD
NLV

Historic Trends Influent Wastewater Flows

	Searchlight			Blue Diamond			MVWRC			Laughlin			Mesquite			Indian Springs		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	0.041	0.039	0.045	0.017	0.019	0.009	0.155	0.155	0.169	1.45	1.52	1.37	1.86	1.89	1.87	0.088	0.106	0.117
Feb	0.042	0.040	0.045	0.026	0.009	0.010	0.157	0.163	0.178	1.52	1.51	1.49	1.89	1.90	2.02	0.091	0.098	0.110
Mar	0.039	0.042	0.039	0.017	0.016	0.011	0.172	0.171	0.183	1.65	1.58	1.51	1.89	1.94	2.00	0.095	0.138	0.115
Apr	0.043	0.040	0.038	0.015	0.016	0.012	0.175	0.174	0.189	1.65	1.58	1.49	1.88	1.91	1.96	0.095	0.139	0.118
May	0.044	0.041	0.042	0.010	0.016	0.012	0.155	0.165	0.170	1.80	1.62	1.56	1.76	1.83	1.91	0.098	0.145	0.136
Jun	0.042	0.042	0.045	0.009	0.015	0.009	0.142	0.147	0.152	1.70	1.75	1.74	1.73	1.84	1.91	0.101	0.150	0.125
Jul	0.048	0.042	0.046	0.011	0.011	0.008	0.140	0.142	0.147	1.98	1.96	1.88	1.72	1.93	1.91	0.101	0.157	0.133
Aug	0.045	0.042	0.044	0.012	0.013	0.012	0.134	0.138	0.147	1.78	1.80	1.78	1.73	1.96	1.90	0.104	0.191	0.135
Sep	0.042	0.041	0.042	0.011	0.015	0.015	0.151	0.147	0.146	1.74	1.70	1.62	1.73	1.90	1.87	0.101	0.156	0.130
Oct	0.039	0.041		0.012	0.014		0.147	0.144		1.73	1.55		1.80	1.99		0.094	0.151	
Nov	0.039	0.042		0.016	0.012		0.146	0.158		1.69	1.37		1.87	2.11		0.094	0.146	
Dec	0.039	0.039		0.012	0.010		0.149	0.158		1.58	1.39		1.83	1.96		0.120	0.159	
ANNUAL	0.042	0.041	0.043	0.014	0.014	0.011	0.152	0.155	0.165	1.69	1.61	1.60	1.81	1.93	1.93	0.099	0.145	0.124

Indian Springs calculation revised in
2021

Non-Discharging Facilities

	Boulder City			
	(Avg. in MGD)		(Total in MG)	
	Influent Flow	Reuse	Influent Flow	Reuse
Jan	1.12	0.01	34.7	0.31
Feb	1.09	0.01	31.6	0.28
Mar	1.05	0.1	32.6	3.1
Apr	1.08	0.07	32.4	2.1
May	1.13	0.24	35.00	7.44
Jun	1.16	0.24	34.80	7.20
Jul	1.19	0.15	36.90	4.65
Aug	1.17	0.16	36.30	4.96
Sep	1.16	0.12	34.80	3.60
Oct				
Nov				
Dec				
Annual				

Las Vegas Wash and Colorado River Dischargers (2024)

	Clark County Water Reclamation District*					City of Las Vegas						City of Henderson			City of North Las Vegas		
	(Avg. in MGD)					(Avg. in MGD)						(Avg. in MGD)			(Avg. in MGD)		
Month	Influent Flow	Main Plant Reuse	DBWRC Reuse	Total Reuse	Effluent to LV Wash	Influent Flow	WPCF Reuse	BMWRC Reuse	DHWRC Reuse	Total Reuse	Effluent to LV Wash	Influent Flow	Reuse	Effluent to LV Wash	Influent Flow	Reuse	Effluent to LV Wash
Jan	107.69	0.48	0.00	0.48	107.57	45.82	0.19	0.00	0.00	0.19	47.76	23.18	2.55	21.46	20.31	0.02	19.13
Feb	107.97	0.20	0.00	0.20	107.94	45.46	0.11	0.00	0.00	0.11	47.91	22.68	3.02	20.40	19.91	0.02	18.88
Mar	109.56	0.26	0.00	0.26	109.30	45.41	0.24	0.00	0.00	0.24	46.37	23.69	4.88	18.68	19.71	0.31	18.41
Apr	111.99	0.67	0.00	0.67	111.32	45.61	0.37	0.00	0.00	0.37	46.67	24.29	6.63	17.25	20.34	0.49	18.66
May	113.01	1.03	0.00	1.03	111.98	46.22	0.46	0.00	0.00	0.46	46.32	24.82	7.82	16.42	20.64	0.84	18.67
Jun	114.45	2.48	0.00	2.48	111.97	46.42	0.51	0.00	0.00	0.51	46.24	25.11	8.52	15.77	20.92	0.87	18.92
Jul	117.75	4.06	0.00	4.06	113.69	47.19	0.52	0.00	0.00	0.52	46.30	24.80	8.25	16.28	21.10	0.82	19.20
Aug	116.15	3.54	0.00	3.54	112.98	47.65	0.53	0.00	0.00	0.53	46.50	24.97	9.04	15.59	21.30	0.91	19.32
Sep	114.48	0.85	0.00	0.85	113.60	47.19	0.53	0.00	0.00	0.53	46.59	24.77	9.34	15.81	21.06	0.65	19.43
Oct																	
Nov																	
Dec																	
Average	112.56	1.51	0.00	1.51	111.15	46.33	0.38	0.00	0.00	0.38	46.74	24.26	6.67	17.52	20.59	0.55	19.12

Net to LV Wash is measured effluent at each treatment
plant

Las Vegas Wash and Colorado River Dischargers (2024)

	Las Vegas Wash Discharge (Avg in MGD)			Discharge Directly to Colorado River (Avg in MGD)			Total Discharge (Totals in A/F)
Month	Influent Flow	Reuse	Effluent to LV Wash	Laughlin Influent Flow	Laughlin Reuse	Net to River	Effluent Flow
Jan	197.00	3.23	195.92	1.37	0.00	1.37	18,768.90
Feb	196.02	3.35	195.13	1.49	0.00	1.49	17,498.29
Mar	198.37	5.69	192.76	1.51	0.00	1.51	17,289.59
Apr	202.23	8.16	193.90	1.49	0.00	1.49	17,389.62
May	204.69	10.16	193.39	1.56	0.00	1.56	17,350.46
Jun	206.90	12.37	192.90	1.74	0.00	1.74	17,322.52
Jul	210.84	13.65	195.47	1.88	0.00	1.88	17,563.70
Aug	210.07	14.02	194.39	1.78	0.00	1.78	17,458.42
Sep	207.50	11.38	195.43	1.62	0.00	1.62	17,536.74
Oct							
Nov							
Dec							
Annual Avg	203.74	9.11	194.37	1.60	0.00	1.60	158178.24

Water Production (2024)

(Totals in AF)

	Las Vegas Valley Water District			City of Henderson			City of North Las Vegas			Boulder City			Nellis Air Force Base			Totals	
Month	WELLS	SNWS	TOTAL	SNWS	BMI	TOTAL	WELLS	SNWS	TOTAL	RMTP	SNWS	TOTAL	WELL	SNWS	TOTAL	WELLS	SNWS
Jan	0	19,344	19,344	4,428	0	4,428	0	3,858	3,858	84	285	368	8.31	18	26	8	28,017
Feb	6	17,544	17,550	4,277	0	4,277	0	3,428	3,428	65	259	324	10.59	43	54	17	25,616
Mar	3	22,002	22,005	5,722	0	5,722	1	4,096	4,097	138	356	495	1.63	60	61	6	32,374
Apr	70	24,593	24,663	6,487	0	6,487	2	4,514	4,516	255	472	727	0.63	66	67	72	36,387
May	4,346	26,682	31,028	8,728	0	8,728	271	5,255	5,526	379	36	415	7.60	32	40	4,625	41,112
Jun	7,772	26,735	34,507	9,704	0	9,704	4	5,938	5,942	417	712	1,129	3.63	73	77	7,779	43,579
Jul	8,632	29,514	38,146	11,008	0	11,008	76	6,488	6,564	449	785	1,234	7.49	90	97	8,715	48,334
Aug	8,841	29,317	38,158	11,073	0	11,073	119	6,489	6,608	408	777	1,185	5.04	92	97	8,965	48,155
Sep	8,199	23,643	31,842	9,234	0	9,234	78	5,695	5,772	423	665	1,088	6.52	93	99	8,283	39,752
Oct			0			0			0			0			0	0	0
Nov			0			0			0			0			0	0	0
Dec			0			0			0			0			0	0	0
YTD	37,869	219,374	257,243	70,660	0	70,660	550	45,761	46,311	2,618	4,346	6,963	51	566	618	38,470	343,325

Historic Trends Water Production
(Totals in AF)

	Las Vegas Valley Water District			City of Henderson			City of North Las Vegas			Boulder City			Big Bend Water District			Virgin Valley Water District			Moapa Valley Water District		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	19,734	20,327	19,344	4,946	4,935	4,428	3,773	3,915	3,858	453	413	368	201	220	208	381	395	378	157	160	140
Feb	18,489	18,957	17,550	4,650	4,680	4,277	3,539	3,649	3,428	483	442	324	216	211	209	345	376	342	142	145	122
Mar	23,496	24,921	22,005	6,102	6,240	5,722	4,371	4,586	4,097	628	616	495	244	228	244	449	488	462	194	181	168
Apr	27,257	26,926	24,593	7,266	7,092	6,487	4,825	4,856	4,514	870	780	727	260	251	232	546	588	537	213	233	218
May	33,792	33,411	26,683	9,325	8,986	8,728	5,721	5,764	5,255	1,093	1,024	1,015	292	283	272	667	686	668	297	263	245
Jun	37,597	35,956	26,735	10,133	9,869	9,704	6,262	6,234	5,938	1,265	1,145	1,129	318	298	292	800	752	764	320	307	305
Jul	38,902	38,811	29,514	10,352	9,737	11,008	6,612	6,532	6,488	1,233	1,114	1,234	302	331	308	835	806	850	313	335	335
Aug	39,072	35,792	29,317	10,295	9,385	11,073	6,569	6,015	6,489	1,242	929	1,185	311	307	314	848	727	863	306	308	316
Sep	33,330	32,370	23,643	8,994	8,414	9,234	5,460	5,344	5,695	1,094	920	1,088	291	290	284	773	681	785	287	263	312
Oct	28,794	28,890		7,501	7,545		5,107	5,344		815	765		260	272		617	644		226	246	
Nov	23,359	22,309		6,003	5,741		4,370	5,344		638	497		238	235		484	476		185	194	
Dec	20,561	20,741		5,256	5,174		4,019	5,344		453	385		220	220		393	398		143	136	
ANNUAL	344,383	339,413	219,384	90,823	87,798	70,660	60,627	62,926	45,762	10,266	9,029	7,563	3,152	3,145	2,363	7,137	7,018	5,649	2,783	2,771	2,160

Wastewater/Water Production Ratios

	City of Las Vegas/Clark County*			City of Henderson			City of North Las Vegas			Boulder City			Big Bend Water District			All Entities **		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	0.67	0.67	0.75	0.48	0.49	0.50	0.45	0.44	0.50	0.25	0.26	0.29	0.70	0.63	0.62	0.60	0.60	0.67
Feb	0.64	0.65	0.75	0.45	0.45	0.46	0.43	0.42	0.50	0.22	0.22	0.30	0.60	0.62	0.61	0.58	0.58	0.66
Mar	0.58	0.56	0.67	0.40	0.38	0.39	0.39	0.38	0.46	0.18	0.18	0.20	0.62	0.69	0.59	0.52	0.50	0.59
Apr	0.49	0.51	0.59	0.33	0.33	0.34	0.34	0.34	0.41	0.13	0.13	0.14	0.60	0.61	0.59	0.44	0.45	0.51
May	0.42	0.42	0.49	0.26	0.27	0.27	0.29	0.30	0.36	0.11	0.10	0.26	0.58	0.61	0.55	0.37	0.37	0.43
Jun	0.37	0.38	0.43	0.24	0.23	0.24	0.27	0.27	0.32	0.09	0.09	0.09	0.54	0.53	0.55	0.33	0.33	0.37
Jul	0.38	0.39	0.41	0.25	0.24	0.21	0.27	0.27	0.31	0.09	0.10	0.09	0.67	0.57	0.58	0.34	0.34	0.36
Aug	0.38	0.42	0.41	0.25	0.26	0.21	0.27	0.30	0.31	0.09	0.12	0.09	0.55	0.55	0.54	0.34	0.37	0.35
Sep	0.42	0.45	0.47	0.27	0.28	0.25	0.31	0.33	0.34	0.10	0.11	0.10	0.53	0.55	0.52	0.38	0.40	0.40
Oct	0.49	0.53		0.34	0.31		0.34	0.36		0.13	0.13		0.59	0.61		0.44	0.46	
Nov	0.58	0.63		0.40	0.39		0.38	0.41		0.17	0.20		0.53	0.66		0.51	0.55	
Dec	0.67	0.69		0.47	0.44		0.43	0.45		0.24	0.27		0.64	0.68		0.60	0.61	
AVG.	0.48	0.50	0.52	0.32	0.32	0.29	0.34	0.34	0.37	0.13	0.14	0.14	0.59	0.61	0.57	0.43	0.44	0.45

Water Production and Waste Flows

Monthly Flows in A/F

	CLV and Clark County Monthly Flow in AF		City of Henderson Monthly Flow in AF		City of North Las Vegas Monthly Flow in AF		Boulder City Monthly Flow in AF		Big Bend Water District Monthly Flow in AF		All Entities Monthly Flow in AF	
Month	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow
Jan	19,344	14,604	4,428	2,205	3,858	1,932	368	106	208	130	28,207	18,978
Feb	17,550	13,184	4,277	1,949	3,428	1,711	324	97	209	128	25,787	17,068
Mar	22,005	14,743	5,722	2,254	4,097	1,875	495	100	244	144	32,562	19,116
Apr	24,663	14,510	6,487	2,236	4,516	1,873	727	99	232	138	36,624	18,856
May	31,028	15,148	8,728	2,361	5,526	1,964	415	107	272	149	45,970	19,730
Jun	34,507	14,811	9,704	2,312	5,942	1,926	1,129	107	292	160	51,573	19,316
Jul	38,146	15,692	11,008	2,359	6,564	2,007	1,234	113	308	179	57,260	20,350
Aug	38,158	15,583	11,073	2,376	6,608	2,026	1,185	111	314	169	57,338	20,266
Sep	31,842	14,884	9,234	2,280	5,772	1,939	1,088	107	284	149	48,219	19,360
Oct												
Nov												
Dec												
YTD	257,243	133,160	70,660	20,333	46,311	17,253	6,963	949	2,363	1,345	383,540	173,039

Recharge and Recovery

Monthly Flows In Acre-Feet

Month	Recharged			Recovered			
	LVVWD	NLV	Total	LVVWD	LV Paiute	NLV	Total
Jan	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0
Aug	0	0	0	90	0	0	0
Sep	0	0	0	364	0	0	0
Oct	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0
Total 2024	0	0	0	454	0	0	0
Total 2023	0	0	0	639	0	0	0
Total 2022	0	0	0	797	0	0	0

* Data provided by SNWA